44. (Amended) An optical device according to Claim 13 wherein said optical control layer is made of a reverse mode polymer dispersed liquid crystal changing in refractive index or absorptivity or scattering degree by an electric field applied by said first electrode and said second electrode, which is constructed by dispersing a low molecular-weight liquid crystal in a liquid crystalline polymer, and said optical control layer becomes a uniform birefringent thin film when no electric field is applied and becomes a scattering state when an electric field is applied.

51. (Amended) The optical device as claimed in Claim 44, wherein at least one of said first electrode and second electrode comprises an electrode group divided into strips, when both of said first electrode and second electrode comprise electrode groups divided into strips, said plurality of strip-formed electrodes constituting said first electrode and said plurality of strip-formed electrodes constituting said second electrodes are disposed to be perpendicular to each other.

58. (Amended) The optical device as claimed in Claim 44, wherein at least one of said first electrode and second electrode is divided into display pixel units, and each of said divided display pixel units has a switching device..

69. (Amended) The optical device as claimed in Claim 44, wherein said optical device receives light from an illumination means having at least a red light source, a blue light source, and a green light source, and further comprising means for successively switching said red light source, blue light source and green light source in synchronization with display image.

78. (Amended) An optical device as claimed in Claim 13 further comprising a reflection film provided on the lower surface of said optical control layer, wherein said second electrode is provided on a lower surface of said reflection film.

82. (Amended) The optical device as claimed in Claim 78, wherein at least one of said first electrode and said second electrode comprises an electrode group divided into strips, when both of said first electrode and said second electrode comprise electrode groups divided into strips, said plurality of strip-formed electrodes constituting said first electrode and said plurality of strip-formed electrodes constituting said second electrodes are disposed to be perpendicular to each other.

85. (Amended) The optical device as claimed in Claim 78, wherein at least one of said first electrode and said second electrode is divided into display pixel units, and each of said divided display pixel units has a switching device.

86. (Amended) An optical device as claimed in Claim 28 further comprising a reflection film provided on the lower surface of said optical control layer, wherein the electrode comprising the periodic electrodes is provided on a lower surface of said reflection film.

88. (Amended) The optical device as claimed in Claim 86, wherein said electrode having periodic electrodes disposed in alternation is provided for each display pixel unit, and each of said divided display pixel units has a switching device.

95. (Amended) The optical device as claimed in Claim 78, wherein said optical control layer is made of a reverse mode polymer dispersed liquid crystal which is constructed by dispersing a low molecular-weight liquid crystal in a liquid crystalline polymer, and said optical control layer becomes a uniform birefringent thin film when no electric field is applied and becomes a scattering state when an electric field is applied.

96. (Amended) The optical device as claimed in Claim 86, wherein said optical control layer is made of a reverse mode polymer dispersed liquid crystal which is constructed by dispersing a low molecular-weight liquid crystal in a liquid crystalline polymer, and said optical control layer becomes a uniform birefringent thin film when no electric field is applied and becomes a scattering state when an electric field is applied.

101. (Amended) The optical device as claimed in Claim 78, wherein said optical control layer comprises one of constructions of liquid crystal particles dispersed in a polymer resin area, a polymer dispersed liquid crystal comprising polymer resin particles dispersed in a liquid crystal, and a polymer dispersed liquid crystal in which respective polymer resin area and liquid crystal area form continuous areas.

102. (Amended) The optical device as claimed in Claim 86, wherein said optical control layer comprises one of constructions of liquid crystal particles dispersed in a polymer resin area, a polymer dispersed liquid crystal comprising polymer resin particles dispersed in a liquid crystal, and a polymer dispersed liquid crystal in which respective polymer resin area and liquid crystal area form continuous areas.

107. (Amended) The optical device as claimed in Claim 78, wherein said optical control layer comprises a holographic polymer dispersed liquid crystal of liquid crystal area having a structure periodically distributed in the form of a diffraction grating.

108. (Amended) The optical device as claimed in Claim 86, wherein said optical control layer comprises a holographic polymer dispersed liquid crystal of liquid crystal area having a structure periodically distributed in the form of a diffraction grating.

113. (Amended) The optical device as claimed in Claim 78, wherein said reflection film comprises one selected from:

a dielectric multilayered film; and

a film lower in refractive index than said light guide.

114. (Amended) The optical device as claimed in Claim 86, wherein said reflection film comprises one selected from:

a dielectric multilayered film; and

a film lower in refractive index than said light guide.

121. (Amended) A display apparatus as claimed in Claim 59 further comprising a transparent electrode provided between said light guide and an optical control layer as a first electrode, and a reflection film provided on the lower surface of said optical control layer, wherein the electrode having periodic electrodes comprises a second electrode and is provided on a lower surface of said reflection film.

125. (Amended) The display apparatus as claimed in Claim 121, wherein at least one of said first electrode and said second electrode comprises an electrode group divided into strips, when both of said first electrode and said second electrode comprise electrode groups divided into strips, said plurality of strip-formed electrodes constituting said first electrode and said plurality of strip-formed electrodes constituting said second electrodes are disposed to be perpendicular to each other.

128. (Amended) The display apparatus as claimed in Claim 121, wherein at least one of said first electrode and said second electrode is divided into display pixel units, and each of said divided display pixel units has a switching device.

129. (Amended) A display apparatus as claimed in Claim 54 further comprising a reflection film provided on the lower surface of said optical control layer, wherein the electrode comprising periodic electrodes is disposed on a lower surface of said reflection film.

131. (Amended) The display apparatus as claimed in Claim 129, wherein said electrode having periodic electrodes disposed in alternation is provided for each of display pixel units, and each of said display pixel units has a switching device.

138. (Amended) The display apparatus as claimed in Claim 121, wherein said optical control layer is made of a reverse mode polymer dispersed liquid crystal which is constructed by dispersing a low molecular-weight liquid crystal in a liquid crystalline polymer, and said optical control layer becomes a uniform birefringent thin film when no electric field is applied and becomes a scattering state when an electric field is applied.

139. (Amended) The display apparatus as claimed in Claim 129, wherein said optical control layer is made of a reverse mode polymer dispersed liquid crystal which is constructed by dispersing a low molecular-weight liquid crystal in a liquid crystalline polymer, and said optical control layer becomes a uniform birefringent thin film when no electric field is applied and becomes a scattering state when an electric field is applied.

144. (Amended) The display apparatus as claimed in Claim 121, wherein said optical control layer comprises one of constructions of liquid crystal particles dispersed in a polymer resin area, a polymer dispersed liquid crystal comprising polymer resin particles dispersed in a liquid crystal, and a polymer dispersed liquid crystal in which respective polymer resin area and liquid crystal area form continuous areas.

145. (Amended) The display apparatus as claimed in Claim 129, wherein said optical control layer comprises one of constructions of liquid crystal particles dispersed in a polymer resin area, a polymer dispersed liquid crystal comprising polymer resin particles dispersed in a liquid crystal, and a polymer dispersed liquid crystal in which respective polymer resin area and liquid crystal area form continuous areas.

150. (Amended) The display apparatus as claimed in Claim 121, wherein said optical control layer comprises a holographic polymer dispersed liquid crystal of liquid crystal area having a structure periodically distributed in the form of a diffraction grating.

151. (Amended) The display apparatus as claimed in Claim 129, wherein said optical control layer comprises a holographic polymer dispersed liquid crystal of liquid crystal area having a structure periodically distributed in the form of a diffraction grating.

156. (Amended) The display apparatus as claimed in Claim 121, wherein said reflection film comprises a film lower in refractive index than a dielectric multilayered film or said light guide.

157. (Amended) The display apparatus as claimed in Claim 129, wherein said reflection film comprises a film lower in refractive index than a dielectric multilayered film or said light guide.

162. (Amended) The display apparatus as claimed in Claim 121, wherein said illumination means has at least a red light source, a blue light source, and a green light source, and further comprising means for successively switching said red light source, blue light source and green light source in synchronization with display image.

163. (Amended) The display apparatus as claimed in Claim 129, wherein said illumination means has at least a red light source, a blue light source, and a green light source, and further comprising means for successively switching said red light source, blue light source and green light source in synchronization with display image.